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The Unconventional Warfare Threat to the Afloat Prepositioning Force
or
How to Defeat a Marine Expeditionary Brigade If You Don't Have Any Tanks

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: _____

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15. Abstract:

With the reduction in numbers of overseas military bases since the end of the Cold War, operational commanders are increasingly dependent upon forces based in the continental United States to respond to crises. The ability of the Afloat Prepositioning Force (APF) to forward stage and deliver equipment and supplies to forces airlifted to a theater of operations is a key enabler in achieving the strategic mobility and power projection required by the National Military Strategy. On a day-to-day basis, ships of the APF sit in ports and anchorages around the world, laden with their precious cargoes, virtually unprotected.

As potential adversaries enter the 21st century they have been forced to seek out unconventional strategies in an attempt to avoid those strengths upon which America's military might is derived. One possible asymmetric strategy involves the employment of special operations forces (SOF).

The convergence of these two trends - an increasing dependence on the APF and the likelihood that potential adversaries will employ asymmetric strategies - has uncovered a critical vulnerability. The vulnerability lies in the inadequacy of current operational security measures to protect APF assets from SOF. In the future, theater commanders face the possibility that an adversary will "neutralize" a Marine Expeditionary or Army Armored Brigade, not through the use of conventional armored forces or air assault, but through attack by SOF on the relatively unprotected ships of the APF.

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INTRODUCTION

"Our demonstrated ability to rapidly respond and to decisively resolve crises provides the most effective deterrent and sets the stage for future operations if force must be used." - National Military Strategy[1]

"During crisis, warfighting materiel afloat in maritime prepositioning ships enables the near-immediate projection of credible military power." - Sean O'Keefe, Secretary of the Navy[2]

With the reduction in numbers of overseas military bases since the end of the Cold War, operational commanders are increasingly dependent upon forces based in the continental United States to respond to crises. The ability of the Afloat Prepositioning Force (APF) to forward stage and deliver equipment and supplies to forces airlifted to a theater of operations from the United States is a key enabler in achieving the strategic mobility and power projection required by the National Military Strategy.[3]

The last decade has seen theater commanders deploy APF assets in support of a wide array of military operations ranging from combat operations in Desert Storm to humanitarian relief operations in Somalia and Bangladesh. The past success of the APF virtually ensures an increase in frequency of its use by theater commanders in the future. The importance of APF assets to mission accomplishment and corresponding dependence of theater commanders on their availability has not seen an increase in the operational protection commensurate with their strategic and operational importance. On a day-to-day basis, ships of the APF sit in

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[1] Chairman, Joint Chiefs of Staff, National Military Strategy (Washington, D.C.: 1997), 2.
[2] Sean O'Keefe, "... From the Sea: Preparing the Naval Service for the 21st Century," 10.
[3] Strategic agility is defined as the timely concentration, employment and sustainment of US military power anywhere, at our own initiative, at a speed and tempo that our adversaries cannot match. Power projection is the ability to rapidly and effectively deploy and sustain US military power in and from multiple, dispersed locations until conflict resolution. U.S. Joint Chiefs of Staff, National Military Strategy, (Washington D.C.: 1997), 3-4.

ports and anchorages around the world, laden with their precious cargoes, virtually unprotected.

As potential adversaries enter the 21st century, they do so facing the stark reality that they, nor any other country exists today "able to match American combat power pound for pound."[4] A report by the National Defense Panel stated:

> *We can assume that our enemies and future adversaries have learned from the Gulf War. They are unlikely to confront us conventionally with mass armor formations, air superiority forces, and deep-water naval fleets of their own, all areas of overwhelming U.S. strength. They will look for ways to match their strengths against our weaknesses. They will actively seek existing and new areas in which to exploit our perceived vulnerabilities."*[5]

This has forced them to seek out unconventional and nontraditional strategies in an attempt to avoid those strengths upon which America's military might is derived. One possible asymmetric strategy involves the employment of special operations forces (SOF).

The convergence of these two trends - an increasing dependence on afloat prepositioned assets and the likelihood that potential adversaries will employ asymmetric strategies in the future - has uncovered a vulnerability that, left unchecked, could have dire consequences for the operational commander. The vulnerability lies in the inadequacy of current operational security measures to protect APF assets from SOF. The unconventional warfare threat is not new, the concepts upon which it relies not dependent upon fancy, expensive weaponry or some future technological advances. In the future, theater commanders face the probability that an adversary will "neutralize" a Marine Expeditionary or Army Armored Brigade, not through the use of conventional armored forces or air assault,

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[4] Richard K. Betts, "Power, Prospects, and Priorities," Naval War College Review, Winter 1997, 20.
[5] National Defense Panel, Transforming Defense: National Security in the 21st Century (Washington: 1997), 11.

but through attack by SOF on those assets while still embarked upon the relatively unprotected ships of the APF.

This paper seeks only to address the unconventional warfare threat to the APF. It is the author's opinion that this asymmetric strategy provides potential adversaries the most "bang for the buck", is within the current capabilities of numerous nations hostile to the United States, has a demonstrated history of success since World War I, and does not carry the stigma attached to other asymmetric strategies such as the use of weapons of mass destruction (WMD).

THE SOF THREAT TO MARITIME FORCES: A HISTORICAL PERSPECTIVE

December 1941: Having lost three cruisers to the British nine months earlier in the Battle of Cape Matapan, the Italian Navy was forced to relinquish control of the Mediterranean to the British. Unable to challenge British surface forces, Axis attempts to regain control of this strategic body of water included everything from aerial bombardment to U-boat attacks. In the pre-dawn hours of December 19th, Italian divers riding manned torpedoes entered Alexandria Harbor in Egypt and sank the British battleships HMS *Valiant* and HMS *Queen Elizabeth* and the tanker *Sagona*, in addition to badly damaging the cruiser HMS *Jervis*. In the span of a few hours, six men were able to effectively eliminate British naval supremacy in the Mediterranean.

The attack at Alexandria illustrates not only the viability of a SOF attack on surface ships but that such attacks can achieve operational and strategic results far out of proportion to the resources expended and operational risk assumed. By the end of World War II, Italian

SOF units sank over 260,000 tons of shipping at a loss of only a dozen men.[6] For the Axis, the elimination of British naval supremacy in the Mediterranean ensured that the supply lines to Rommel's forces in North Africa would be secure and "occupation of Egypt would only have been a question of time, bringing with it incalculable consequences for the outcome of the war."[7]

During the Vietnam War, the United States Navy experienced the greatest single-incident combat loss at the hands of Viet Cong frogmen. On the evening of November 1, 1968, a pair of swimmer-delivered mines each containing between 150 and 500 pounds of explosives detonated under the 384-foot long USS Westchester County (LST-1167), leaving 25 crewmen, passengers and South Vietnamese dead.[8] Had the tons of ordnance stored on the barges adjacent to the Westchester Counter sympathetically detonated, the resulting blast would have been "the equivalent of a small nuclear weapon" resulting in the immobilization or destruction of the entire Mobile Riverine Force.[9]

THE AFLOAT PREPOSITIONING FORCE

Originally conceived to address the inability of U.S. armed forces to respond timely to a crisis in Third World countries, the APF has undergone considerable growth not only in size but in its importance to theater commanders. Today all four branches of the armed services and the Defense Logistic Agency (DLA) utilize the APF to meet strategic prepositioning needs. The APF consists of three component programs: the Maritime Prepositioning Force (MPF) supporting the Marine Corps, the Combat Prepositioning Force (CPF) supporting the

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[6] William H. McRaven, SPEC OPS Case Studies in Special Operations Warfare: Theory and Practice (Novato, CA: Presidio Press, 1996), 110-111.
[7] Iunio Valerio Borghese, Sea Devils (London, England, 1952), 158.
[8] G. W. Frederickson, "Mined in the Mekong," Vietnam, August 1998, 26-27.

Army, and the Logistics Prepositioning Ships (LPS) supporting the Navy, Air Force and DLA.[10]

The MPF consists of 13 ships allocated among three MPS Squadrons (MPSRON) based in Diego Garcia, Guam-Tinian, and the Mediterranean. Each 4-5 ship MPSRON carries enough heavy equipment and supplies to support 17,300 Marines of a Marine Air-Ground Task Force (MAGTF) for 30 days.[11] Major equipment includes 90 tanks, 75 light armored vehicles, 327 amphibious assault vehicles, 90 155mm howitzers and 386 high mobility multipurpose wheeled vehicles.[12] Capable of getting underway on 12 hours notice, the MPSRON, when joined with MAGTF personnel airlifted into the theater of operations, provides theater CINCs with credible combat power in a matter of days.

Based upon recommendations of the 1992 Mobility Requirements Study and the success of the MPS program, the Army initiated the Army Prepositioned Afloat (APA) program. Complementary in nature to the MPS force, Army Prepositioned Set 3 provides the capability to rapidly deploy an Army reinforced heavy brigade consisting of 123 M1A1 Abrams tanks, 60 M2 Bradley fighting vehicles, a supporting artillery battalion, an engineer battalion, and air defense and support forces.[13] APA ships and combat personnel are able to marry up within 14 days of notification when responding to contingencies in the Middle or Far East and be ready for combat operations within 22 days.[14]

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[9] Ibid., 31.
[10] "Military Sealift Command Ship Inventory." <www.msc.navy.mil/cgi-bin/inventory.pl?var=PM3> (6 January 2000).
[11] Erin M. Metzinger, "Prepositioning as a Joint Undertaking: Military Sealift Command's Afloat Prepositioning Force," Marine Corps Gazette, August 1997, 13.
[12] Silvia Rosas, "Military Sealift Command and the Marine Corps MPS, A Partnership Forward... From the Sea." Marine Corps Gazette, March 1996, 24.
[13] Kim A. Richards, "Prepo Afloat: Key to Power Projection," Army Logistician, January/February 1998, 24.
[14] "Army War Reserve –3 and –5," <http://call.army.mil/call/newsltrs/97-7/rsochp5.htm> (29 December 1999)

Air Force prepositioning needs are supplied by four vessels of the LPS force, providing ammunition stockpiles to sustain Air Expeditionary Force (AEF) operations.

OPERATIONAL VALUE OF APF TO THE THEATER COMMANDER

"The 7th MEB was the first force on the ground that offered a credible defense against mechanized attack. The Army airborne troops who got there first were good, but were too lightly armed and supplied to stop tanks for very long. The quick arrival of the 7th MEB and the MPS squadron must have put Saddam Hussein on notice that our President was serious about defending Saudi Arabia, for openers." – LTGEN Walter E. Boomer, USMC[15]

One of the most critical operational factors in war is that of time, particularly in its' relationship to space. The APF concept seeks to tilt the balance of these two factors in favor of the operational commander by placing forces necessary for combat operations closer to possible areas of employment thus reducing deployment time for our own forces while denying enemy forces additional time to prepare for attack or consolidate gains.

Operation Desert Shield illustrated the importance of APF assets to the factor of time. Ships from MPS Squadron 2 based at Diego Garcia began offloading supplies in Saudi Arabia just 8 days after receiving the order to mobilize.[16] Of the three legs of the strategic mobility triad - sealift, airlift, and prepositioning - the afloat prepositioning of equipment and supplies provided the best balance between the requirements for speed and the need to introduce heavy, sustainable combat forces. The 7th Marine Expeditionary Brigade (MEB) provided General Norman Schwarzkopf the first credible defense against a possible invasion of Saudi

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[15] "Special Trust and Confidence Among the Trail-Breakers," United States Naval Institute Proceedings, November 1991, 48.

[16] The Presidential Mobilization Order to deploy was received by MPSRON 2 on 7 August 1990. Underway the next day, the ships arrived in Al Jubail on 15 August after a 7-day transit. By September 2, 9 ships of MPSRONs 3 and 4 had arrived in Saudi Arabia, providing enough equipment and supplies to sustain 33,600 Marines for 30 days.

Arabia by Iraqi armor. The amount of cargo delivered by the first three ships of the MPF to arrive in Saudi Arabia, freed up the equivalent of over 3,000 C-141 airlifts flights, at a time when airlift resources were strained.[17] The timely arrival of heavy forces is imperative in limiting the "window of vulnerability", that period in which lightly armed (Persian Gulf War) or tripwire forces (South Korea) might be subject to attack by a superior force.

The deployment of APF assets provides theater commanders with an added degree of deterrence when responding to crisis situations. The deployment of a carrier battle group (CVBG) or amphibious ready group (ARG) is normally the first option when the United States wishes to signal resolve to a potential aggressor. The deployment of APF serves as an additional display of U.S. intentions to support an ally. This added degree of deterrence is becoming more important as nations become desensitized to the sight of a CVBG or ARG off their coasts. As in the case of a CVBG or ARG, APF employment as a deterrent is not dependent upon negotiating airfield or port access. Should deterrence fail, the presence of the APF provides the theater commander the ability to rapidly introduce forces in preparation for combat operations.

THE APF: CRITICAL STRENGTH OR VULNERABILITY?

Critical strengths are defined as those capabilities considered vital for the accomplishment of a given or assumed military objective.[18] Using this definition, the equipment and supplies stored afloat as part of the APF would be considered a critical strength as they provide the resources necessary to accomplish a military mission, whether that mission be deterrence, the active defense of an ally, or actions in support of military

[17] Arthur P. Brill Jr., "Directly From the Sea," Sea Power, May 1999, 28.
[18] Milan Vego, "Critical Factors and Center of Gravity," On Operational Art, September 1999, 219.

operations other than war such as humanitarian operations in Somalia or Bangladesh. Critical strengths inadequately protected and left open to enemy attack become critical vulnerabilities.[19] It is the operational commander's responsibility to ensure the operational protection of critical strengths to ensure they do not become vulnerabilities that can be exploited by enemies to shape the battlespace.

The APF represents a critical strength, the loss of which would severely impact a theater commander's ability to effectively project power in support of national interests. The delay or disruption in the arrival of MPS forces during the Persian Gulf War would have had dire consequences had Iraqi forces chosen to attack Saudi Arabia. According to General Schwarzkopf, the only option for US forces had this scenario materialized would have been to "pull back to an enclave on the coast and hope we could either reinforce them or get them out. It would have been something like the U.S. retreat to the Pusan perimeter in the early days of the Korean War - a very disturbing thought."[20]

Not only would the loss of APF assets have the immediate affect of denying a theater commander the timely arrival of combat forces, but the equipment and supplies in those ships would have to be replaced from stocks in the United States, a time-consuming and costly proposition. Marine Expeditionary Brigade and Army Heavy Armored Brigade forces airlifted into theater would be ineffective as a fighting force without the equipment and supplies required to sustain them, instead becoming a burden on the infant logistic pipeline in place early in a conflict. Arrival of replacement equipment could not be expected for at least three weeks based on the transit speed of available sealift assets, assuming equipment and supplies were available staged at ports of debarkation ready for shipment.

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[19] Ibid.

The effect on the flow of follow on forces as the result of the loss of prepositioning ships would be twofold. Equipment and supplies loaded to replace equipment lost would inevitably displace other cargo destined for the theater resulting in the delay of all follow on forces scheduled to arrive by sealift. Additionally, it is generally recognized that there is a significant shortfall of sealift assets for the sustainment phase of operations. Prepositioning ships lost to enemy action would not be available to deliver sustainment cargoes, further reducing the overall sealift capacity for the flow of follow on equipment and supplies.

A 1990 sealift survivability study placed the value of the cargo loaded on a single MPS ship at over $500 million dollars, a figure that is likely to have doubled in the decade since the study was published.[21] The cost to replace or repair lost and damaged ships would need to be added to this amount to arrive at the true estimate of the value of resources lost. While the value of lost equipment is of less concern to a theater commander than the immediate effect the loss has on current operations, it is nonetheless a factor that must be considered in deciding the amount of operational protection APF forces are afforded.

The short term and long term restrictions resulting from the delay in the timely arrival of initial entry combat forces combined with the corresponding delay in the arrival of follow on forces would serve to severely limit the capability of the theater commander to complete assigned tasking. This has resulted in the transition of the APF force from a critical strength to critical vulnerability, one which potential adversaries are likely to exploit.

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[20] Norman H. Schwarzkopf, It Doesn't Take a Hero (New York, NY: Bantam Books, 1992), 310.
[21] U.S. Navy Department, Maritime Prepositioning Ships Time Charter Party between Braintree I Maritime Corporation and the United States of America. (2nd LT. John P. Bobo), (Washington, DC, 1985), 52.

THE 21st CENTURY THREAT

The equipment available to unconventional warfare forces today is not unlike that used with such success by the Italians in World War II. To be sure, technological advances have increased the reliability and lethality of such weapons, but the basic theory upon which their employment is based has undergone little change in the intervening six decades. Transported covertly by a number of means, to include commercial vessels, submarines and even private pleasure craft, modern day special warfare forces equipped with limpet mines, manned torpedoes, mini-submarines and various surface craft loaded with explosives are likely to enjoy success similar to that of their frogman forefathers.

APF assets are most susceptible to attack by SOF at two points in the logistics pipeline. The first is during periods of relative peace while at anchorage in homeports located at Diego Garcia, Guam-Tinian and at various locations in the Eastern Mediterranean. This is the point at which ships are afforded the least operational protection due to a variety of factors the most prominent being their location, assumed to be outside the reach of most potential enemies. The second occurs while offloading equipment and supplies during times of crisis or wartime, the location of which depends on the situation.

The assumption that ships of the APF are offered a degree of protection due to their distance from potential enemies is one most often associated with MPS squadrons based in Diego Garcia and Guam. This assumption should be considered flawed due to the known capability of numerous countries to insert SOF over long distances by a variety of means.

Commercial shipping, to include vessels engaged in maritime trade, fishing and tourism, is one such means by which SOF can transit to an area of operations and be inserted undetected. North Korean use of civilian merchant ships for this purpose is well documented.

The motor vessel *Ton Gon Ae Guk Ho,* while "disguised as a trade ship", has frequently been employed to support KWP special operations throughout Asia. It has been equipped with sophisticated communications devices, heavy machine guns, small firearms, grenades, a larger than normal crew and 'special training' facilities.[22] The captain of the 14,000-ton DPRK merchant vessel *Changsan-ho* claimed that the ship was one of 27 ocean-going merchant vessels, ranging in size from 3,000 to 20,000 tons, supporting international terrorist activities.[23] The ability of commercial vessels to enter virtually any port under the guise of conducting innocent maritime trade activities makes them particularly well suited to the task of insertion of SOF.

The threat is particularly high in ports such as Guam where in 1997 more than 370 cargo and 2,183 fishing vessels of foreign registry called upon the primary commercial port in Apra Harbor, most passing within 200 yards of APF ship anchorages enroute to the their berths. Commercial traffic can be expected to increase significantly in the future as the Port Authority of Guam actively markets its deep-water port as the largest and safest between Asia and Hawaii, with future plans calling for an expansion of the current footprint to include new deep-water cargo piers, upgraded fisheries facilities and cruise ship facilities.[24] The fact that APF anchorages are surrounded by over 40 popular sport dive sites further complicates operational security as dive boats and scuba divers frequently operate in close proximity to the anchored vessels.[25]

The relative absence of commercial shipping in the British Indian Ocean Territory of Diego Garcia does not completely eliminate the possibility of attack by special forces.

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[22] Joseph S. Bermudez, "North Korean Special Forces 1st ed. (Annapolis, MD, 1988), 99.
[23] Ibid.
[24] "Guam Transportation – Seaport Facilities." <www.investguam.com/pft/seaport.html> (8 January 2000).

Through the skillful use of deception, perhaps by feigning equipment casualty, commercial vessels could gain access to the protected harbor without arousing undue suspicion. Something as innocent as a large sailing vessel embarked on a round the world cruise could be used to covertly insert SOF.

Throughout the history of SOF maritime operations submarines have been a preferred method for covert insertion. The manned torpedoes used by the Italians in their successful attack on Alexandria were lashed to the side of a submarine for the transit to their launch point. Utilizing older submarines such as the Whiskey and Romeo-classes of Soviet design, North Korea has been assessed as capable of inserting and supporting small amphibious light infantry brigade teams anywhere in the southwest Pacific (and conceivably even Hawaii and the U.S. mainland).[26] While the trend of foreign navies is toward the employment of smaller diesel-powered coastal submarines in the littorals, new technologies such as air independent propulsion (AIP) have significantly enhanced submerged endurance and increased operational range. Equipped with Kilo-class submarines upgraded with AIP fuel cells and the next generation Lada/Amur-class, China and Iran could be expected to utilize their forces in a similar fashion with a much higher probability of success.

Upon entering foreign ports in support of an exercise, crisis or wartime tasking, the threat to APF assets increase. No longer faced with the problem of transiting long distances to the target, SOF units are able to employ a much wider variety of vehicles and equipment, ranging from midget submarines and mini-submersibles to radio–control boats and jet skis.

The capability and reliability of modern midget submarines and swimmer delivery vehicles (SDV) far exceeds that of similar equipment used by Italian and British SOF in World

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[25] "More Guam Diving: Ship & Plane Wrecks." <www.mdaguam.com/diving2.htm> (8 January 2000).

War II. Costing less than 10 percent the price of 'blue water' submarines and ranging in size from the 70-ton Yugo to the 300-ton Sang-O, midget submarines are able to operate virtually undetected in the congested coastal waters and harbors characteristic of potential crisis areas such as the Persian Gulf, Mediterranean Sea and waters around Indonesia and the Korean peninsula.[27] The ability of a North Korean Sang-O to operate undetected inside South Korean waters for three days in September 1996, only discovered when it ran aground on its second attempt to recover a special forces team, highlight the capability that currently exists among potential adversaries.[28] Current vehicles offered by international arms manufacturers include:

- CE2F/X100T Chariot (Italy) – deployed from a mother ship or larger submarine, capable of transporting two commandos and an assortment of limpet mines submerged to an operational radius of 25 nm. Equipped with autopilot and Global Positioning System (GPS).[29]

- Shallow Water Attack Submarine (SWATS) MGE130/ER (Italy) – capable of transporting two chariots and up to 14 combat swimmers to a maximum range of 320 nm at a depth of 150 meters.[30]

Once placed, limpet mines or demolition charges have a low probability of detection. The first indication that a ship has been subject to a SOF attack is normally the detonation of the device. The covert nature of special operations provides potential adversaries the added advantage of deniability. Utilizing time-delay fuzes, combat swimmers can schedule devices to detonate days after they have departed the area, making it difficult to establish responsibility.

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[26] Bermudez, 98.
[27] Joris Janssen Lok. "Mini Submarines and Special Forces Pose Maximum Threat." Jane's International Defense Review, June 1998, 63.
[28] Ibid.
[29] Ibid.
[30] Ibid.

THE CURRENT PROTECTIVE POSTURE

On any given day the majority of the ships belonging to the various services prepositioning programs sit at anchor unprotected from even the most basic of security threats. Manned by small crews, the typical ship has little or no capability to provide anything but minimum security at key points of entry to the vessel such as the quarterdeck or gangway. The realization that a potential terrorist or commando could approach and board a ship undetected has led to limited measures to increase security such as the installation of remote surveillance cameras and the employment of high security locks and night vision devices for security watches.[31] Such measures could be easily defeated by a SOF element with the minimum of training and the most basic equipment.

Such protective measures as frequent hull searches to determine the presence of limpet mines or searching of berths and anchorages for demolition charges are not currently conducted. APF vessels located in Guam are searched infrequently, not as a component of a comprehensive ship's security plan, but for the benefit and at the request of local Navy Explosive Ordnance Disposal (EOD) personnel conducting training in limpet response procedures. There are currently no EOD forces stationed at Diego Garcia to conduct similar searches.

Active defense in time of conflict is provided primarily by a combination of Navy EOD, Mobile Inshore Undersea Warfare Units (MIUWU), Inshore Boat Units (IBU) and Coast Guard Port Security Units (PSU). Additionally, Marine Corps Fleet Anti-Terrorist teams may be tasked to provide pierside security of high-value units (HVU). Without considerable change in structure and quantity, the probable success of these forces in

preventing a successful attack by SOF elements is more likely to be dependent upon the proficiency and equipment of the attacker than the protective measures in place. A brief synopsis of capabilities and limitations is provided below.

EOD: Active duty units tasked with rendering safe unexploded ordnance to include limpet mines. One unit is equipped with the MK 6 Marine Mammal System (MMS), a six dolphins detachment capable of providing defense for harbors, anchorages, and individual ships against swimmers and divers. MMS represents the only comprehensive surface and subsurface swimmer detection and response capability.[32] EOD forces should be considered low density-high use units when employed during wartime situations for defense of harbors and ports.

MIUWU: Equipped with radar and underwater acoustic detection equipment, MIUWUs are tasked to provide inshore surface and subsurface surveillance coverage in a harbor/port environment.[33] Primarily manned by Reserve personnel, MIUWU provide no peacetime security or surveillance, with the possible exception being during exercises.

IBU: Tasked with providing waterborne security for HVUs. Each unit is equipped with two 27-foot aluminum hull boats armed with .50-caliber and 7.62 mm machine guns.[34] Primarily manned by Reserve personnel, IBUs, like MIUWUs, provide no peacetime security to the APF.

PSU: Coast Guard units tasked with waterborne security for HVUs. Each unit is typically equipped with six boats ranging in size from 22-27 feet.[35]

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[31] "Military Sealift Command (MSC) Security Enhancements." <http://security.crane.navy.mil/security> (14 January 2000).
[32] "Marine Mammals." <www.surfpac.navy.mil/EOD/eodmu3/3marmam.htm> (3 January 2000).
[33] Timothy R. Dring, "Can We Protect Our Coasts?" United States Institute Proceedings, February 1998, 61.
[34] Kurt Smay, "It's Naval Reservist Who Guard Corps' Ships In Port," The Leatherneck, December 1998, 26.
[35] Dring, 61.

OPERATIONAL PROTECTION FOR THE APF: RECOMMENDATIONS

Operational protection is aimed at preserving the combat effectiveness of one's own forces and assets located or deployed within a given theater of operations so that they can be employed at the decisive time and place.[36] Due to the limited resources available and costs associated with protecting ones own forces, it falls upon the operational commanders to prioritize and decide which resources, based upon their importance to overall mission accomplishment, will be protected to the maximum extent possible, and those which are to be placed at increased risk by a reduced level of protection.

It is important to note than any defense aimed at mitigating the SOF threat can only serve to reduce, not eliminate, the probability that attacks will be effective. Three months prior to the attack on Alexandria, the Italians had conducted a similar attack on Gibraltar, sinking two British tankers and a motorship.[37] "Extreme precautions had been taken for some time past against the varieties of human torpedo or one-man submarines entering our harbors," lamented Prime Minister Winston after the attack on Alexandria. He went on to add, "Not only are nets and other obstructions used but underwater charges are exploded at frequent irregular intervals in the fairway. None the less, these men penetrated the harbour."[38] Despite advance knowledge of Italian capabilities and aggressive measures to defend against the threat, the Italians still proved successful.

The following are recommendations to mitigate the SOF threat to the APF:

Recommendation #1: The greatest current threat is to those forces stationed at Guam. Relocation of APF assets home based in Guam to a more remote location, such as Tinian or

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[36] Vego, 323.
[37] McRaven, 99.

Saipan, would result in a significant reduction in the threat from SOF inserted by commercial vessels. Due to the volume of commercial traffic in the Mediterranean, an alternative site should be identified as soon as possible for the MPSRON based there also.

Recommendation #2: The easiest way to deter an attack by SOF is to remain underway as much as possible. As such, APF vessels should spend the majority of time underway, while remaining in the theater. This would significantly increase the difficulty in fixing the location of ships for a coordinated attack by SOF prior to opening of general hostilities (as might be expected to occur prior to a North Korean invasion of South Korea or a Chinese invasion of Taiwan). This option would incur a significant increase in operating costs of the APF, as ships are currently in port 75% of the time. If underway steaming is deemed too expensive, forces could resort to "drifting", literally remaining underway operating on minimum machinery. An increase in underway time would however, increase the threat of attack by submarines and surface vessels, requiring a separate evaluation of the increased threat compared to the reduced threat from SOF attack.

Recommendation #3: Restructuring and integration of MIUWU and IBU as predominantly active duty units collocated with APF assets and tasked with daily surveillance of harbors and anchorages. Protection would be provided 365 days a year vice the current doctrine of calling up Reserve units at the opening of hostilities, a practice that is ineffective in deterring possible peacetime preemptive SOF attacks. Station at least one small combatant (perhaps drawn from

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[38] Winston Churchill, quoted in William H. McRaven, SPEC OPS Case Studies in Special Operations Warfare: Theory and Practice (Novato, CA: Presidio Press, 1996), 107.

the Oliver Hazard Perry class frigates currently being decommissioned) to prosecute contacts detected by MIUWU sensors. The stationing of a small combatant with APF assets is not meant to address other operational security shortfalls, such as the threat posed by blue water submarines or surface combatants, although they might also be considered for employment in that role.

Recommendation #4: Collocate an EOD detachment, including MK 6 MMS, with APF forces. Forces would be tasked with routine hull and berth searches, limpet response and swimmer detection and defense. This option would entail a significant increase in the number of MK 6 MMS detachments and overseas basing of these assets but would provide the only effective defense against attacks by combat swimmers.

CONCLUSION

> *"Our nation is short on sealift. However, on the plus side, we have a significant amount of supplies afloat on Army, Air Force, and Marine Corps prepositioning ships." – Admiral Joseph W. Prueher, Commander In Chief, U.S. Pacific Command.*[39]

Theater commanders have come to depend on the APF to deliver the equipment and supplies necessary to effectively deter and, if necessary, defeat aggression. Operational planning which assumes, based on the experiences of the Gulf War, that APF assets will be unopposed in their mission of delivering the materiel upon which U.S. combat power depends should be viewed as incomplete and its validity challenged. The operational commander must be careful not to draw incorrect conclusions based on the "last war" when determining

[39] James D. Hessman and Gordon I. Peterson, "The Right Fight... with the Right Forces," Sea Power, December 1998, 13.

potential future threats to our forces. Clearly, the ships of the MPS were pivotal in providing the combat power necessary to repel any attempt by Saddam Hussein's forces to invade Saudi Arabia. The demonstrated success of APF concept has led all of the services to increase their dependence on afloat prepositioned resources with little thought as to the possible consequences of their loss in time of war.

In attempting to determine what asymmetric strategy future adversaries might employ to mitigate America's overwhelming superiority in conventional forces, we must not become fixated on potential future technologies or the prospect of the use of "doomsday weapons" such as those associated with the WMD threat. While it is important to look to the future to identify emerging threats to our military forces, we must not ignore those present today.

A cardinal rule of operational planning is to never assume away a capability, especially one that has the potential to significantly alter the strategic and operational environment in which we expect to operate. The time is now to take a hard look at the importance of the APF, consider the threat posed by unconventional forces, and provide this national strategic resource the protection it deserves or be prepared to deal with the inevitable consequences.

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